

## SEQUENCE LISTING

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<120> Sulfotransferase, peptide thereof and DNA encoding the same

<130> Q83405

<150> PCT/JP03/02500

<151> 2003-03-04

<150> JP 2002-57527

<151> 2002-03-04

<150> JP 2002-245994

<151> 2002-08-26

<160> 16

<210> 1

<211> 1041

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (1)..(1041)

<400> 1

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1 5 10 15	
gga agc ctt gcc gtt ggg agt ctc ctg tat cta gtc gcc aga gtt ggg	96
Gly Ser Leu Ala Val Gly Ser Leu Leu Tyr Leu Val Ala Arg Val Gly	
20 25 30	
agc ttg gat agg cta caa ccc att tgc ccc att gaa ggt cga ctg ggt	144
Ser Leu Asp Arg Leu Gln Pro Ile Cys Pro Ile Glu Gly Arg Leu Gly	
35 40 45	
gga gcc cgc act cag gct gaa ttc cca ctt cgc gcc ctg cag ttt aag	192
Gly Ala Arg Thr Gln Ala Glu Phe Pro Leu Arg Ala Leu Gln Phe Lys	
50 55 60	
cgt ggc ctg ctg cac gag ttc cgg aag ggc aac gct tcc aag gag cag	240
Arg Gly Leu Leu His Glu Phe Arg Lys Gly Asn Ala Ser Lys Glu Gln	
65 70 75 80	
gtt cgc ctc cat gac ctg gtc cag cag ctc ccc aag gcc att atc att	288
Val Arg Leu His Asp Leu Val Gln Gln Leu Pro Lys Ala Ile Ile Ile	
85 90 95	
ggg gtg agg aaa gga ggc aca agg gcc ctg ctt gaa atg ctg aac cta	336

Gly Val Arg Lys Gly Gly Thr Arg Ala Leu Leu Glu Met Leu Asn Leu	
100 105 110	
cat ccg gca gta gtc aaa gcc tct caa gaa atc cac ttt ttt gat aat	384
His Pro Ala Val Val Lys Ala Ser Gln Glu Ile His Phe Phe Asp Asn	
115 120 125	
gat gag aat tat ggt aag ggc att gag tgg tat agg aaa aag atg cct	432
Asp Glu Asn Tyr Gly Lys Gly Ile Glu Trp Tyr Arg Lys Lys Met Pro	
130 135 140	
ttt tcc tac cct cag caa atc aca att gaa aag agc cca gca tat ttt	480
Phe Ser Tyr Pro Gln Gln Ile Thr Ile Glu Lys Ser Pro Ala Tyr Phe	
145 150 155 160	
atc aca gag gag gtt cca gaa agg att tac aaa atg aac tca tcc atc	528
Ile Thr Glu Glu Val Pro Glu Arg Ile Tyr Lys Met Asn Ser Ser Ile	
165 170 175	
aag ttg ttg atc att gtc agg gag cca acc aca aga gct att tct gat	576
Lys Leu Leu Ile Ile Val Arg Glu Pro Thr Thr Arg Ala Ile Ser Asp	
180 185 190	
tat act cag gtg cta gag ggg aag gag agg aag aac aaa act tat tac	624
Tyr Thr Gln Val Leu Glu Gly Lys Glu Arg Lys Asn Lys Thr Tyr Tyr	
195 200 205	
aag ttt gag aag ctg gcc ata gac cct aat aca tgc gaa gtg aac aca	672
Lys Phe Glu Lys Leu Ala Ile Asp Pro Asn Thr Cys Glu Val Asn Thr	
210 215 220	
aaa tac aaa gca gta aga acc agc atc tac acc aaa cat ctg gaa agg	720
Lys Tyr Lys Ala Val Arg Thr Ser Ile Tyr Thr Lys His Leu Glu Arg	
225 230 235 240	
tgg ttg aaa tac ttt cca att gag caa ttt cat gtc gtc gat gga gat	768
Trp Leu Lys Tyr Phe Pro Ile Glu Gln Phe His Val Val Asp Gly Asp	
245 250 255	
cgc ctc atc acg gaa cct ctg cca gaa ctt cag ctc gtg gag aag ttc	816
Arg Leu Ile Thr Glu Pro Leu Pro Glu Leu Gln Leu Val Glu Lys Phe	
260 265 270	
cta aat ctg cct cca agg ata agt caa tac aat tta tac ttc aat gct	864
Leu Asn Leu Pro Pro Arg Ile Ser Gln Tyr Asn Leu Tyr Phe Asn Ala	
275 280 285	
acc aga ggg ttt tac tgc ttg cgg ttt aat att atc ttt aat aag tgc	912
Thr Arg Gly Phe Tyr Cys Leu Arg Phe Asn Ile Ile Phe Asn Lys Cys	
290 295 300	
ctg gcg ggc agc aag ggg cgc att cat cca gag gtg gac ccc tct gtc	960
Leu Ala Gly Ser Lys Gly Arg Ile His Pro Glu Val Asp Pro Ser Val	
305 310 315 320	
att act aaa ttg cgc aaa ttc ttt cat cct ttt aat caa aaa ttt tac	1008
Ile Thr Lys Leu Arg Lys Phe Phe His Pro Phe Asn Gln Lys Phe Tyr	
325 330 335	
cag atc act ggg agg aca ttg aac tgg ccc taa	1041

Gln Ile Thr Gly Arg Thr Leu Asn Trp Pro  
 340 345

<210> 2  
 <211> 346  
 <212> PRT  
 <213> Homo sapiens

<400> 2  
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 1 5 10 15  
 Gly Ser Leu Ala Val Gly Ser Leu Leu Tyr Leu Val Ala Arg Val Gly  
 20 25 30  
 Ser Leu Asp Arg Leu Gln Pro Ile Cys Pro Ile Glu Gly Arg Leu Gly  
 35 40 45  
 Gly Ala Arg Thr Gln Ala Glu Phe Pro Leu Arg Ala Leu Gln Phe Lys  
 50 55 60  
 Arg Gly Leu Leu His Glu Phe Arg Lys Gly Asn Ala Ser Lys Glu Gln  
 65 70 75 80  
 Val Arg Leu His Asp Leu Val Gln Gln Leu Pro Lys Ala Ile Ile Ile  
 85 90 95  
 Gly Val Arg Lys Gly Gly Thr Arg Ala Leu Leu Glu Met Leu Asn Leu  
 100 105 110  
 His Pro Ala Val Val Lys Ala Ser Gln Glu Ile His Phe Phe Asp Asn  
 115 120 125  
 Asp Glu Asn Tyr Gly Lys Gly Ile Glu Trp Tyr Arg Lys Lys Met Pro  
 130 135 140  
 Phe Ser Tyr Pro Gln Gln Ile Thr Ile Glu Lys Ser Pro Ala Tyr Phe  
 145 150 155 160  
 Ile Thr Glu Glu Val Pro Glu Arg Ile Tyr Lys Met Asn Ser Ser Ile  
 165 170 175  
 Lys Leu Leu Ile Ile Val Arg Glu Pro Thr Thr Arg Ala Ile Ser Asp  
 180 185 190  
 Tyr Thr Gln Val Leu Glu Gly Lys Glu Arg Lys Asn Lys Thr Tyr Tyr  
 195 200 205  
 Lys Phe Glu Lys Leu Ala Ile Asp Pro Asn Thr Cys Glu Val Asn Thr  
 210 215 220  
 Lys Tyr Lys Ala Val Arg Thr Ser Ile Tyr Thr Lys His Leu Glu Arg  
 225 230 235 240  
 Trp Leu Lys Tyr Phe Pro Ile Glu Gln Phe His Val Val Asp Gly Asp  
 245 250 255  
 Arg Leu Ile Thr Glu Pro Leu Pro Glu Leu Gln Leu Val Glu Lys Phe  
 260 265 270  
 Leu Asn Leu Pro Pro Arg Ile Ser Gln Tyr Asn Leu Tyr Phe Asn Ala  
 275 280 285  
 Thr Arg Gly Phe Tyr Cys Leu Arg Phe Asn Ile Ile Phe Asn Lys Cys  
 290 295 300  
 Leu Ala Gly Ser Lys Gly Arg Ile His Pro Glu Val Asp Pro Ser Val  
 305 310 315 320  
 Ile Thr Lys Leu Arg Lys Phe Phe His Pro Phe Asn Gln Lys Phe Tyr  
 325 330 335  
 Gln Ile Thr Gly Arg Thr Leu Asn Trp Pro  
 340 345

<210> 3  
 <211> 12  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: 5' Primer for PCR  
  
 <400> 3  
 ctacaaccca tt 12  
  
 <210> 4  
 <211> 12  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: 3' Primer for PCR  
  
 <400> 4  
 ttagggccag tt 12  
  
 <210> 5  
 <211> 12  
 <212> DNA  
 <213> Artificial Sequence  
  
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 <223> Description of Artificial Sequence: 5' Primer for PCR  
  
 <400> 5  
 atgctattca aa 12  
  
 <210> 6  
 <211> 24  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: 5' Primer for PCR (GP-226)  
  
 <400> 6  
 cggaactcgt gcagcaggcc acgc 24  
  
 <210> 7  
 <211> 24  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Description of Artificial Sequence: 5' primer for PCR (GP-224)  
  
 <400> 7  
 tcgaccttca atggggcaaa tggg 24  
  
 <210> 8  
 <211> 25  
 <212> DNA  
 <213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: 5' primer for PCR (SFTex2F)

<400> 8  
actggggaac cagaaaaatg aaaag 25

<210> 9  
<211> 25  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: 3' primer for PCR (SFTex2R)

<400> 9  
gtgtctccag gcacaacaca tagtg 25

<210> 10  
<211> 55  
<212> DNA  
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<220>  
<223> Description of Artificial Sequence: 5' primer for PCR (SFTgateF2)

<400> 10  
ggggacaagt ttgtacaaaa aagcaggctt ctttaagcgt ggcttgctgc acgag 55

<210> 11  
<211> 53  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: 3' primer for PCR (SFTgateTstop)

<400> 11  
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<210> 12  
<211> 22  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Ig kappa signal sequence

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Val Ile Met Ser Arg Gly  
20

<210> 13  
<211> 7  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: FLAG peptide

<400> 13  
Asp Tyr Lys Asp Asp Asp Lys  
1 5

<210> 14  
<211> 94  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: OT3 seuqnce

<400> 14  
gatcatgcat tttcaagtgc agattttcag cttcctgcta atcagtcgct cagtcataat 60  
gtcacgtgga gattacaagg acgacgatga caag 94

<210> 15  
<211> 26  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: OT20 sequence

<400> 15  
cgggatccat gcattttcaa gtgcag 26

<210> 16  
<211> 25  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: OT21 sequence

<400> 16  
ggaattcttg tcacgctcgt ccttg 25